

DaimlerChrysler AG

Patent claims

- 5 1. A method of producing a hollow profile having at least one flange (6; 8; 10; 11) extending along the hollow profile, comprising the steps:
- folding or roll forming an initial hollow profile (5) from a sheet, with at least one flange (6; 8; 10; 11)
  - 10 being formed which projects from the initial hollow profile;
  - welding a joint location of the initial hollow profile (5); and
  - internal high pressure forming (IHPF) of the initial
  - 15 hollow profile (5) into a finished hollow profile by applying an internal high pressure by means of a fluid into the interior of the initial hollow profile (5), the at least one flange (6; 8; 10; 11) being clamped in place in an IHPF tool (1) in such a way that its position and
  - 20 dimensions remain unchanged relative to the finished hollow profile during the internal high pressure forming.
2. The method as claimed in claim 1, characterized in that at least one flange (6; 8; 10; 11), in the closed
- 25 IHPF tool (1), is acted upon by a holding-down force which prevents a subsequent flow of material from the flange (6; 8; 10; 11) into the finished hollow profile during the internal high pressure forming.
- 30 3. The method as claimed in claim 1, characterized in that the at least one flange (6; 8; 10; 11), in the closed IHPF tool (1), is acted upon by a holding-down force of this kind which allows a defined subsequent flow of material from the flange (6; 8; 10; 11) into the

finished hollow profile during the internal high pressure forming.

4. The method as claimed in claim 2 or 3, characterized  
5 in that the at least one flange (6; 8; 10; 11) is formed  
by doubling of the material of the sheet during the  
folding or roll forming.

5. The method as claimed in claim 2 or 3, characterized  
10 in that the at least one flange (6; 8; 10; 11) is formed  
by one end of the sheet during the folding or roll  
forming, the other end of the sheet abutting against the  
transition region between the flange (6; 8; 10; 11) and  
the initial hollow profile (5).

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6. The method as claimed in one of claims 4 to 6,  
characterized in that the initial hollow profile (5) is  
welded in the region of the flange (6; 8; 10; 11) or  
outside this region.

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